**Minutes (Draft 2)**
**EMP-LTRMP Analysis Team Meeting**
**6 November 2003**
**8:30 A.M. – 4:30 P.M, Dubuque, Iowa**

**Welcome and Role Call**
33 people were present. See attached attendance list, filename *draft_attendence11_06_03*.

**Review/Changes 23 July, 2003 Analysis-Team (A-Team) Minutes** (5 Min)
Tom Boland said there were 5 presentations on one computer—those will go first. There were no additions to the agenda and no additions or changes to the July 23 minutes. Only brief summaries of the presentations given at this meeting will be included in the minutes of this meeting. [However, the longer presentations will have details summarized in attached files.] Please contact the individual presenters with any post-meeting questions. Moved, seconded, and passed that the July 23, 2003 minutes were approved (unanimous).

**Federal FY04 Budget Updates**
Marvin Hubbell (USACE) filled in for Roger Perk (USACE), who had to attend another meeting. The U.S. House is considering appropriating 18.3 million for EMP, the U.S. Senate 20 million. At this time there has not been any action—continuing resolution funds EMP. There will be no budget probably until after January 1, 2004. The Corps is anticipating a budget around 18.3 million dollars right now because it is customary to plan conservatively, for the lowest scenario while under a continuing resolution. No more details are available. [Note, after this meeting, we received information that the House/Senate Joint Committee had agreed on $19 million as the mark-up for EMP.]

Tom Boland (IADNR) asked, "If we are anticipating 18.3 million, this is a cut—how are we planning for that? When do we expect to plan and how do we do that?" Marvin Hubbell replied that the Corps and USGS/UMESC are exchanging scopes of work at this time that include various scenarios.

**Federal FY04 Scopes of Work (SOW)**
Pat Heglund (USGS/UMESC) discussed the FY04 scopes of work in progress. She referred to a summary of the core LTRM Program we were previously e-mailed. (See Attached, filename is *Annual Basic Monitoring.doc*.) The scope of work for 04 was in anticipation of a $20 million budget—it used 02 sampling as a template for 04. It included Land Cover/Land Use, Science Planning, Data management, sampling—the entire program. The vegetation sampling in Illinois is also included in that plan. The agreement with Illinois was that La Grange and Pool 26 would continue to sample submersed vegetation from 2002—2007, and the program would re-evaluate the need for vegetation sampling in these reaches in 2007.

Aquatic vegetation did increase this summer because of the drought, John Chick of the Illinois Natural History Survey reported, stating that it was a good thing the state of Illinois had funded vegetation sampling this past summer when the LTRMP funding was temporarily removed.

In response to a question about when the A-Team would see the Scopes of Work, Pat Hegland reported that Marvin Hubbell (USACE) is preparing revisions on SOW and it will be forwarded to the A-Team next week. Included are scenarios for a lower budget with the consequences of any reductions listed.

Rob Maher (ILDNR) asked what the price tag is to do the fieldwork only without the rest of the LTRM program. Pat answered that the overall budget is 4.99 million dollars - that was the total LTRMP budget in FY02. Clarification was requested—with inflation, would this cover that work within Fy04?

Pat Heglund replied this budget must assume field stations will absorb their own inflation costs within house. Tom Kelly (USGS/UMESC) clarified that $4.981million was the actual fy02 budget. All agencies are being requested to make up the difference for inflation. Someone asked if the program as a whole knew what that difference would be or had a plan for how it would be absorbed if the states could not absorb it.

Marvin Hubbell (USACE) added that a number of efficiencies have been gained within the last 2 years with field data entry and the Quality Assurance/Quality Control process. They are assuming those make up the difference in workload.

Tom Boland (IADNR) asked, "Are we going to wait until the first of the next year to decide adjustments and who will decide who will make those? There are problems with timing."

Pat Heglund replied that we can't be spending at the higher level now and try to make up for that loss at the end of the year. Marvin Hubbell added that authority to spend on continuing resolution is limited to spending the lowest amount (in this case $18.3 million). "It's possible in conference committee that it could be between the two. We must assume the lowest at this point," he said. Mark Cornish (USACE) agreed that is an accurate statement. Pat Heglund (USGS/UMESC) said the plan is to spend conservatively initially and then have an array of possibilities to look at if more money comes in. The corps has those various scopes and USGS is waiting for written comments back from the Corps. As soon as they come to an agreement, it will be forwarded to everyone.

John Sullivan (WIDNR) asked about previous scopes of work and commented there are usually a number of incomplete projects that carry over for completion in the next fiscal year. "Will Fy04 scopes of work include the carryovers (unfinished projects) from 03 and possibly 02? How do you track completion of work paid for but not yet completed?"

Pat Heglund replied that the incomplete projects are not specifically targeted as work items within scopes of work—she said there are just a few projects like that each year. Jenny Sauer (USGS/UMESC) added that in water quality other state staffs were playing catch-up. Pat Heglund said she wanted to publicly thank Jim Fischer of WIDNR's Onalaska Field Station for all the work he had done to keep water quality work going after Dave Soballe's (USGS/UMESC) left for another job last March. She added that they were also redirecting other staff as well to help move Water Quality work along and get it back up to speed.

In response to a question about whether the Corps would consider giving LTRMP the $4.981 million no matter what final figure Congress decided to appropriate, Marvin Hubbell said the [legislated] formula would be the starting point for deciding how to divide EMP money between HREP (habitat) and LTRMP (monitoring) programs. John Chick (ILNHS) said it looks like there is a $400K difference between the amounts LTRMP would get at the $18.3 million level verses the $20 million level. Tom Boland stated that although scopes of work are planned and agreed upon differently than we used to do it, it's not necessarily bad and he is not opposed to it except that the timing gets crunched. "Be aware we need to act quickly as the A-Team", he cautioned. "We need to be involved in any reductions and changes. We can have conference calls and meetings to respond and accommodate."

Marvin Hubbell added that within the scopes of work, the baseline monitoring components of program are firm and agreed on—aspects of baseline monitoring are not part of the comments that the Corps is providing back to USGS/UMESC regarding the scope of work.

John Sullivan asked if we were assuming $18.3 million, would it cover costs of the baseline monitoring work as planned? In past, Pete Redmon (USEPA) added, we had itemized lists of projects before we knew how much money we were getting, and we knew what would be dropped first—how was this list or core monitoring created? Is this a golden number? It never seemed to make sense as a golden number. We don't know what to ask for. It gets critical that if we're 10-20% short and need to be finding other sources of funding. Pretty clearly we're missing a sizable chunk—2 yrs inflation and a year of delayed sampling. We need more than a normal year of money to make up for a few odds and ends last year that weren't picked up."

John Chick followed up—"If we start at 4.99, it covers the spreadsheet. If we must cut 400K, how do we cover the spreadsheet? We're discussing 2% of EMP's budget—it [core monitoring] should be a high

priority. We need to make a recommendation at the EMPCC level. If we're strictly following the appropriation formula, we won't be able to do the core monitoring. Is this internal or with the corps also? Pat Heglund said, "We haven't gone beyond "what if" scenarios, and we do not plan to reduce permanent staff. For example, we would save $10k if we dropped invertebrate sampling, but doing that would require more statistical analysis in out years to handle larger gaps in data in any component dropped or cut. An important part is understanding the consequences of making those decisions. "At what point will consequences to field stations be discussed?" Terry Dukerschein asked. She pointed out that field stations had to deal with inflation, and that most were permanent staff at field stations as well. She mentioned that money in recent years has been coming in late, and that states can't operate on negative cash flows on a regular basis and might need to be planning before January if money will not be coming in by January, especially in a field station like hers where permanent staff works on other essential LTRMP work that is not considered "core" monitoring by USGS/UMESC in the Fy02 or FY04 SOW's. She pointed out that this "non-core work" (her staff's help to USGS with day to day coordination of the monitoring in all states) has freed up USGS scientists to be more productive leading program-wide analysis, publication, and reporting efforts. Dick Steinbach (USFWS) said he appreciates what she's talking about but he emphasized that there is a need to start looking at doing things opportunistically with temporary staff since when most of the cost is fixed costs flexibility is very limited. John Sullivan pointed out that in the past when they transferred money into monitoring from the habitat side, they built fewer habitat projects. "I don't think Congress will sustain funding if it's just for monitoring," Steinbach added. "On the river as whole, lots of money is being spent—we have to be realistic about where money is coming from and have flexibility. Right now we have it, but whether that's true in the future remains to be seen."

John Chick said that although we don't know what the future will be, we do know it's authorized for 33.3 million. All we can say to Congress is "This is the best core monitoring program we can do and here's how much it costs." Chick asked for a resolution to the Environmental Management Program Coordinating Committee (EMPCC). He moved **that the A-team forward a recommendation to EMPCC that the LTRMP budget go forward at the core monitoring level detailed in the attached table to be funded in FY04 at $4.99 million regardless of whether it comes in at.18.3 or 20 million.** Considerable discussion ensued about various implications of the motion. A major point was that $4.99 million was less than adequate already to carry out the monitoring program detailed in the table, since inflation and equipment refreshment were not accounted for in the $4.99 million, and these were facts of life that would generate additional expenses each year. Only official Analysis Team members voted. All voted in favor of Chick's motion except John Sullivan of Wisconsin DNR, who opposed the motion, and Marvin Hubbell of the USACOE, who abstained from voting.

In general those present were very concerned about going below 4.99 million to continue the FY02 sampling scheme and did not want to lock themselves into that figure either, because it was not enough to do the monitoring as outlined in the table. Marvin Hubbell pointed out that fiscal performance is very important to securing funding for future years. There was an audit of USGS practices with the LTRM program last year, and Marvin Hubbell pointed out that the bottom line is to bill on regular basis as quickly as possible. He reported that Wisconsin is the only state billing on an annual basis, and that for fiscal performance it is much better if USGS gets billings on a more regular basis, such as monthly or quarterly. Tom Kelly commented that starting in FY03, USGS issued brand new coop agreements. When states request reimbursement under these agreements, they must use the Health and Human Services (HHS) payment management system. The problem with that is that USGS has no idea what's going on. State Finance people need to drop Tom Kelly an e-mail or note—"today I drew down x dollars"—it's helpful if Tom gets that notification as soon as it happens. Otherwise, it takes 2-3 months for him to get the information from HHS. The Corps can pay USGS under an accrual method, but state field stations need to bill USGS. Tom Kelly also mentioned that to get around this year's problems with the continuing resolution, USGS might have to give out the money in increments until the final budget is signed. He said he would see if USGS could get incremental funds to give some funds to start operating next year.

**LTRMP Science Planning Update**

Pat Heglund said teams will be set up under 04 SOW to put together implementation plans that are flexible and that include a ranking system, estimates of implementation costs, and a sequence of which go first. The committees will be formed and meet in FY04. John Sullivan asked, "Are we assuming this is the

highest priority after 'core' monitoring? Additional options are based on highest priority science questions. Is that the general concept?" Tom Boland asked—"Has it lost steam? Pat Heglund answered, "Yes—but it needs to be positioned—those questions are there. Pete Redmon pointed out that sometimes unexpected funding shows up—for example, first they were told there was no discretionary regional money in EPA—then they got another message—big city issues were being funded this year. Minneapolis/St. Paul and Chicago were two major cities identified for funding. "If there's a project related to Minneapolis/St. Paul on a list of Science priorities or Chicago for the Illinois River folks, this work should be encouraged [this year], even though it's not sampling."

**Base LTRMP Program**
The group agreed this topic had already been covered in the "Scope of Work" portion of the agenda.

**Report to Congress**
Marvin Hubbell reported that the draft Report To Congress (RTC) hits streets next Wednesday, and that schedule wise it is largely on track. It will be discussed at the November EMPCC meeting with a public informational component incorporated into the EMPCC meeting. There are 4 items left to resolve—the Information Needs Assessment (INA), HREPS on non-federal land, delegated authority for HREPs, major rehabilitation policy portions in chapters 3 and 4 need completion. The Corps is allowing comments on this preliminary draft and comments need to be in by December 15, 2003. They will distribute a hard copy to all on EMPCC by November 15, 2003, and a copy will be available on the website in 2-3 weeks. Many of the same people are working on the Navigation Study and are also parallel track on some issues with the Navigation study—that is the primary reason we've seen slippage in the schedule, Marvin Hubbell explained. Mark Cornish requested graphics from the multi-year LTRMP reports for the RTC-and said he would approach individuals today who had good graphics [in their presentations] that would help sell program. "It is important to follow up with why monitoring is important and what difference does it make," he said. "We need to read critically—does it really say what impact this program has made on the system?" Mark is looking for a variety of graphics and is open to recommendations and suggestions from the group. The graphs are presently in draft form, and John Sullivan said he felt that proposing to use draft graphs seems like putting the cart before the horse. Mark Cornish explained they had been given schedules—they could put out something that is not the best face for program, but if the principle scientists are willing to share it and confident today, why should we not use them?" The data itself has been QA/QC'd for the last 10 years—the data is sound." John Sullivan expressed frustration that they would see the RTC that summarizes the reports before we see those multi-yr reports. Marvin Hubbell stated that the RTC wouldn't try to summarize-just to extract what substantiates a message that will go to Congress. John Sullivan asked, "Can we actually evaluate those reports first?" There was consensus that if the corps is working with the program component specialist and the figures won't change, it would be OK to use them. Pat Heglund said that Leslie Holland Bartels would need to approve any graphics before they go out of the Center [USGS/UMESC].

Pat Heglund introduced Jeff Hauser, the new Water Quality Specialist, who will start fulltime in mid-December at UMESC. Until that time Jim Fischer (WIDNR) will continue to be the contact for the LTRMP water quality component.

**10-Year Trend Analysis Reports**

1. **Macroinvertebrate Component presented by Jennie Sauer, USGS/UMESC (La Crosse)**

The FY2003 for the macro-invetebrate component included:

-A Multi-year Synthesis Report of the LTRMP's Macro invertebrate Component (1992-2002
-Status and Trends Modeling Efforts with Mayflies and fingernail clams
-Designing Methods
-Suggestions for future analysis

There were about 125 invertebrate sites per study area. The bulk was stratified random sampling (SRS) sites. For mayflies, fingernail clams, and midges, no trends were evident in any of the years

(temporal). There were some spatial patterns evident—most often fingernail clams, mayflies, and midges were collected in backwaters and impounded areas from silt/clay substrate. Historical sites that provide a snapshot in time were also sampled. Modeling was done as a collaborative effort by Brian Gray, Jim Rogala, Jennifer Sauer (all of USGS/UMESC), and Roger Haro (UW-La Crosse) for Pools 8 and 13. Objectives of modeling included quantifying differences by pools and/or aquatic areas, estimating temporal trends, and exploring associations between macro invertebrates and different habitat predictors. In Pool 13 there was a strong association between sediment type and mayflies, but other predictors performed poorly. The best distribution was a zero-inflated negative binomial distribution. Substrate was characterized with a coarse visual field classification. If we can characterize substrate better, can we improve the model? If yes, there are sample design implications—we could decrease sample size. Yes, slight improvement. Not cost effective, however- we have no particle size for this model. The model was stepped pool 13 to pool 8 and this year they will be working with fingernail clams in backwaters of Pools 4, 8, and 13. Some findings so far are that predictors that vary at local scale show reduced variance at the aquatic area scale. In future analyses, they want to extend the models to Pool 26 and La Grange. Sauer acknowledged the field stations for collecting the data.

John Sullivan asked how they would restructure sampling based on this evaluation of the invertebrate data. Jennifer Sauer replied that they were just getting into it—if they can get better estimates of substrate types, they can decrease sample size within LTRMP study reach pools and go to other pools with the effort saved. They also need to collect sediment particle size information as a 1-2 yr effort. They currently have 12 samples for each LTRMP study reach to run particle size. Sullivan suggested a hydrometer method as a quick way to get at particle size, and Sauer replied that if it would give them a quick and dirty way to do particle size in the field, they would consider that method.

**2. Aquatic Vegetation Component, presented by Yao Yin, USGS/UMESC (La Crosse)**

Yao Yin summarized analysis products and results from the FY2003 analysis effort as follows:

A Multi-year Synthesis Report for Submersed Aquatic Vegetation by Yao Yin (USGS/UMESC) and Heidi Langrehr (WIDNR) summarizes all data between 1991 and 2002 for both transect and Stratified Random Sampling methods. Management issues addressed in this report include Habitat Enhancement and Rehabilitation, the large scale water level drawdown in Pool 8, and important factors driving Submersed Aquatic Vegetation.

A second report by Yao Yin and Heidi Langrehr presents Summary Statistics of Submersed Aquatic Vegetation in 36 Backwater Areas located in 5 different LTRMP study reaches.

A third report by Theresa Blackburn (IADNR) and **Megan Moore** (MNDNR) will provide a detailed analysis of Influences on Submersed Aquatic Vegetation Along Fixed Transects in Pools 4,8, 13 and 26 of the Upper Mississippi River System.

A fourth report by Robert Cosgriff (INHS) Yao Yin (USGS), Theresa Blackburn (IADNR), Thad Cook (INHS) and Heidi Langrehr (WIDNR) summarizes data on how floodplain forests are regenerating.

Yao Yin spent the remainder of his time presenting findings from the comprehensive multi-year report he coauthored with Heidi Langrehr (1991-2000 transect data and 1998-2002 SRS data) (see attached MS Word file:*Vegetaton and Wate Quality Summary11_06_03* for details).

Following Yin's presentation, John Sullivan asked how we could do a better job of quantifying surface algae and lemna (duckweeds) stating that he had measured their light-limiting effects. Yao Yin answered that they—monitor abundance with visual observations. Sullivan asked rhetorically if there was need for a field technique to quantify relative density of surface algae and lemna and stated his concerned for its buildup in impounded and backwater areas. " It's certainly something we could adjust," Yin replied.

**3. Water Quality Component, presented by Jim Fischer, WIDNR (Onalaska)**

Jim Fischer explained the he is the Water Quality Specialist at WIDNR's Onalaska Field Station and has been helping USGS/UMESC with LTRMP water quality operations day to day for the past 7 years in many on-going projects. He has led the component in the 9-month transition between Dave Soballe's and Jeff Hauser's tenure. He acknowledged field station staff members, Jim Rogala (USGS/UMESC), and John Sullivan (WIDNR) for their contributions as well. He listed 2003 Water Quality –related products:

- A Multi-year synthesis report
- Light penetration work this past summer
- Statistical analyses by Brian Gray and Sarah Suarez that looked at multivariate analyses and power-trends within seasons and across study reach pools
- Turbidity and suspended solids comparisons
- Fixed site monitoring with a reduced set of chemical parameters started in April and May 2003
    - 2003 data is already online for internal review due to efficiencies gained and also not monitoring so frequently helped get that done sooner.

Fischer said management and monitoring implications were the two main topical areas today (See details of his presentation in the attached file.) Understanding the effects of tributaries; the movement and partitioning of suspended solids; habitat issues and water quality criteria all resulted from mining the LTRM dataset. "There is much more to be learned from this, we're getting good start on it now, " Fischer concluded.

Following Fischer's presentation, in response to a question about whether the LTRMP Water Quality database included temperatures from tributaries, discussion ensued among A-Team members about the effects of power plants on habitat when they discharge warm water that they have used as cooling water. There was also discussion about what appears to be a warming trend in climate. EPA might be facing the issue of a lot more heat coming into the system, and it's an important issue. They are anticipating hot regulatory environment. Intake records at every power plant are a good source of long-term water temperature data, although back flushing sometimes confounds this information. Joe Wlosinski (USGS/UMESC) put a summary of daily temperature averages for LTRMP pools on the LTRMP website that is current through 1998. John Sullivan commented that he would rather see the actual temperature values than a summary. Joe Wlosinski averaged some power plants together to come up with Pool temperature averages.

**4. Spatial Data Query Tool, Presented by Doug Olsen, USGS/UMESC**

The LTRMP Spatial Data Query and Visualization Tool allow visualizing LTRMP date in a spatial context with a stand-alone application. Olsen distributed copies (by CDROM) of Version 3.0. Its core functionality is to provide base map data for overlay. Users can query it logically or spatially, and it includes all LTRMP data through 2002 plus the LTRMP water chemistry laboratory data. It allows for spatial visualization of the LTRMP component data and is straightforward and simple to use. Tom Boland asked if you could cut and paste the tables to other formats, and Olsen answered, "No, but it can save as a text file to export into MS Excel or other software." He stressed that this is not a live database -the one downside is that there is no direct link to Oracle and it is dated. Ideally it should be updated on an annual basis, and to do a complete update takes only a few weeks. John Sullivan commented that resource managers get a grasp of what the LTRM program is all about and "a hands on feel" when he shows them the spatial database query tool. "It provides a substantial amount of information in a very efficient way," he concluded. Larry Robinson (USGS/UMESC) asked if the tool is on the LTRMP website, and Doug Olsen replied that is, but the files are large and users need a broadband connection to download data from it. It works with Windows 98 and up.

Jim Fischer added that a query and visualization tool is being developed for fixed water quality sites as well. This tool includes only the Stratified Random Sampling data. The fixed site tool is web-based. Select a site and it looks at that site over time. Doug Olsen has a mailing list to distribute additional CD's. In a couple weeks, full website will be revamped. There is no copyright—he can copy and distribute it in house.

**5. Fisheries Analyses, presented by Brian Ickes, USGS/UMESC and others as listed below**
Brian Ickes (USGS/UMESC) explained that the fish component took a collaborative approach to community and other analyses. "There are incredible complexities within this system, and it was a broad-brush sweep," he said. The LTRMP fish component recently reduced 10 gear types to 6, and has made about 25000 site visits over the life of the program. "Fish integrate over time and space," Ickes commented. "We need to understand how both single species and communities relate to habitat within the system and what scales are important. There are 136 species in the LTRMP database from rare to abundant and ubiquitous. It is challenging to approach modeling and relate it to all the other things going on." FY03/04 products from the LTRMP fish component are listed below:

A Synecology Report was headed by Valerie Barko (MDC) with assistance from John Chick (INHS) consists of community ecology analyses and uses multiple analytical approaches to outline shifts or changes in fish community structure and the associated environmental factors.

An Auteclogoy Report covers the single species ecology and was headed by Dan Kirby (IADNR)

A Life History Database and summary report describes how individual fish species relate to habitat and environment in each life stage. It is a compiled database of life history data from LTRMP and information from the peer-reviewed literature. Matt O'Hara (INHS) heads the project.

A 10-year Synthesis Report presented by Mike Stueck and headed by Mel Bower (IADNR), with the assistance of Andy Bartels (WIDNR) describes LTRMP analyses and trends detected through 2002.

An Invasive Species Report headed by Kevin Irons (INHS)

The Data Management and Quality Assurance effort revised the LTRMP fish database to make integrations easier, improve ways to serve data, and design the tools to do so. Andy Bartels, WIDNR, headed this effort.

Every product listed above is now in draft form and being reviewed by coauthors. Within 3 weeks (from Nov. 6) all will be in USGS/UMESC management review. It has truly been an interagency collaborative effort, Ickes reported.

Brian Ickes headed a final product, the Fish Data Query tool, with assistance from Andy Bartels and others. It is one of the tools designed for ease of use by resource managers and the public.

More detailed summaries of the Fish Components products and related discussions at the A-Team meeting are attached in the MS Word file *Fish Summaries11_06_03.doc*.

**Agency Reports (15 Min)**

**Minnesota DNR**: Walt Popp reported the capture of 23-pound bighead carp by a commercial fisherman in Lake Pepin generated lots of excitement with the media and press The day before the bighead carp was captured, they had a big meeting of various agencies and the commissioner's office and discussed various ways to prevent the spread of bighead carp into the system.

**Wisconsin DNR**: John Sullivan reported they still have no unit leader for the Mississippi River Team and they Wisconsin DNR is experiencing budget problems. Terry Dukerschein explained that they are determining workload priorities in the Water Division and that the DNR is in a second round of "Workforce Reduction" for temporary and some permanent staff. There will be a third round of layoffs beginning in July 2005.

**Iowa DNR**: Tom Boland reported that Iowa DNR is also having budget problems and reductions of temporary staff.

**Illinois DNR** is in midst of yet another reorganization, Rob Maher reported. Many restorations are scheduled, which underscores the import of Mark Pegg's and John Chick's LTRMP staff collecting data. They are doing fieldwork for catfish population assessment and evaluating harvest regulations of catfish. The LTRMP data useful for this because it bolsters the findings they are seeing with hoop netting. They are also sampling shovelnose sturgeon. A commercial fisherman in southern Illinois caught the 1st wild black carp in the US in an oxbow lake that floods every year. It was triploid and weighted 12 pounds. John Chick's field stat collected a full complement fish with funding $ from Great Rivers Education Center. They saw increases in aquatic vegetation in 2003 relative to prior years. John Tucker's work with red-eared sliders, and increasing temperatures is taking off the bi-catch of red-eared sliders in catfish hoop nets has tripled—he thinks due to an extra clutch every year. They are vegetarians. John Tucker has great seminar on red-eared information for presentations at professional meetings. Mark Pegg passed out a summary of products and highlights for the Havanna field station and thanked the ILDNR for getting funding for them to do a full complement of fish sampling.

**Missouri DOC—**Janet Sternberg reported that staff changes included Steve Eder replacing Norm Stuckey, who retired. She briefly described a workshop for the 4 new research field stations doing ecological work. Valerie Barko reported on a 2-day workshop for big rivers that included a tour of the river and day science planning in Missouri's big rivers. She noted their field station is still called the Open River Field Station, but the work covers big rivers and wetlands. The Missouri delegation to the A-Team left for their flight at 3 pm.

**USEPA**—USEPA—Pete Redmon reported EPA Region 5 is working with John Chick and Mark Pegg and a large interagency group of folks on invasive species barriers and a rapid response plan for dealing with the possibility that fish bypass the barrier. The draft plan calls for the Illinois DNR to rotenone a segment of the Chicago Sanitary and Ship Canal if it has to do a last ditch effort, which would cost ½ million to do once. By April or May they will finalize the rapid response plan. Pete Redmon pointed out that Larry Shepherd from Region 7 (USEPA) is here because the Mississippi River is a 2-region thing. Larry Shepherd explained that EPA is responding to an outside petition for consistent water quality standards for the upper Mississippi and Missouri Rivers. The Water Quality task force of Upper Mississippi River Basin Association is working on this issue and is working via UMRCC Water Quality Technical Section on this issue on behalf of the overall health of the Mississippi River.

**USACE**-Marvin Hubbell announced a public information meeting from 11 am-1 pm on November 20th in conjunction with the EMPCC meeting and requested that some graphics from LTRMP data analyses be displayed and also submitted for the Report To Congress. Pat Heglund will forward the request to Leslie Holland-Bartels. Mark Cornish added that this is the best A-Team meeting he has ever attended as far as the dissemination of information. "You took the lemons we handed you last year and made lemonade," he said. Tom Boland commented, "And we don't want any more lemons."

**Time and Place for Next A-Team Meeting(s)**
Tom Boland will represent the A-Team at EMPCC Nov. 6 meeting in La Crosse, and John Sullivan will be with him. EMPCC meets again February 24 and 25 in St. Louis, MO. The group determined the next A-Team meeting would be the second week of February unless issues dictated that a conference call would be needed before that. Fast or urgent decisions could be addressed by conference call, whereas complicated and complex decisions would need a face-to-face meeting to resolve. For now, a face to face meeting will be set up for Wednesday, Feb. 11, 2004--location to be determined later. Tom Boland thanked all members and regular attendees for the last 2 years of continued support and participation. John Sullivan, who is taking over as chairperson, commented that he would be looking for input on agendas, directions, and concerns. "Tom did great job and I will follow Tom's demeanor," he concluded.

Tom Boland thanked everyone for his or her presentations. This is a world-class program on this system, he concluded. The meeting adjourned at 4:30 pm.

Respectfully submitted,
Terry Dukerschein

**ANALYSIS TEAM ATTENDENCE NOVEMBER 6, 2003, ONALASKA, WI**

| Name: | Agency | Phone |
|---|---|---|
| 1. Tom Boland*, Chair | IADNR | 563-872-4976 |
| 2. Rob Maher* | ILDNR | 618-466-3451 |
| 3. T. Miller | USACE-St. Louis | |
| 4. Roger Perk | USACE | 309-794-5475 |
| 5. Marvin Hubbell | USACE | 309-794-5428 |
| 6. Pete Redmon* | USEPA, Region 5, Chicago | 312-886-6110 |
| 7. Kevin Stauffer* (absent) | MNDNR | |
| 8. Dick Steinbach* | USFWS | 217-224-8580 |
| 9. John Sullivan* | WIDNR | 608-785-9995 |
| 10. Larry Shepherd | USEPA, Region 7, Kansas City | |
| 11. Valarie Barko | MODOC | 573-243-2659 x26 |
| 12. Robert Gaugush | USGS | 608-791-6207 |
| 13. Douglas Olsen | USGS | 608-781-6333 |
| 14. Terry Dukerschein | WIDNR | 608-783-7550 x706 |
| 15. Dan Kirby | IADNR | 563-872-5495 |
| 16. Mark Pegg | INHS | 309-543-6000 |
| 17. Mike Steuck | IADNR | 563-872-5495 |
| 18. Walt Popp | MNDNR | 651-345-3331 |
| 19. John Chick | INHS | 618-466-9690 |
| 20. Mike Thompson | USACE-St. Louis | |
| 21. Tom Kelly | USGS | 608-781-6229 |
| 22. Jim Rogala | USGS | |
| 23. Jim Fischer | WIDNR | 608-783-6169 |
| 24. Janet Sternberg | MODOC | 573-522-4115 x3372 |
| 25. Brian Ickes | USGS | 608-783-7550 x69 |
| 26. Yao Yin | USGS | 608-783-7550, ext. 53 |
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| 29. Pat Heglund | USGS | 608-781-6338 |
| 30. Larry Robinson | USGS | |
| 31. Brian Gray | USGS | |
| 32. Jeff Houser | USGS | |
| 33. Matt O'Hara | INHS | |
| 34. Kevin Irons | INHS | |

* Indicates voting member of Analysis Team. Walter Popp represented Minnesota for Kevin Stauffer, who was absent. Fred Kollmann of NRCS was the other voting member who was absent, and he did not designate a representative.